

In the Specification:

Please amend the abstract as follows:

Conventional virus detection software monitors incoming arrivals of network traffic. Retroactive analysis and/or monitoring of previously accepted traffic is not included in the scope of protection. A retroactive virus detection and propagation history tracking mechanism provides identification of successive recipients of a newly discovered virus which may have eluded detection during the lag time prior to effecting the detection of a new virus. A propagation history maintains a set of recipients receiving a potentially harmful transmission. Upon detection of a particular transmission or portion thereof as being a virus, the propagation history contains a set of infected recipients, which the tracking mechanism notifies so as to perform remedial action and contain the virus to the known set of infected recipients. In this manner, configurations of the invention maintain a set of successive recipients of a virus, and retroactively track and contain the newly propagated virus once detected, ~~mitigating the conventional epidemic period which results during the lag time for recognition of the virus by conventional virus detection applications.~~